SCIENTIFIC ABSTRACT

Replication incompetent, recombination incompetent retroviral vectors (G1Na and LNL6) will be used to mark autologous peripheral blood and marrow cells removed and stored from patients with CLL following treatment with conventional dose chemotherapy. This study is designed to determine the efficacy of purging and the origin of relapse following autologous bone marrow transplant (infused autologous cells or cells left in the systemic circulation following preparative therapy for the bone marrow transplantation). We estimate that on the average 6×10^7 CD34 cells will be infused and that in these, there will be between 200 and 20,000 neoplastic cells marked with the retrovirus. This protocol will also determine if the peripheral blood or marrow is more heavily contaminated with neoplastic cells after the conventional dose therapy which is used before storage of the autologous marrow or peripheral blood cells.